

Ottawa County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 16 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Ottawa County economy.¹

These 16 sectors have a total direct output of approximately **\$105.3 million** and support **617 jobs** in Ottawa County. Running the model for all 16 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Ottawa County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	616.8	23.06%	\$33,460,765	24.91%	\$105,326,045
Indirect Effect	61.9	2.31%	\$3,669,637	2.73%	\$8,118,844
Induced Effect	48.6	1.82%	\$3,202,289	2.38%	\$6,206,030
Total Effect	727.3	27.19%	\$40,332,690	30.02%	\$119,650,919

As shown in the above table, agriculture, food, and food processing sectors support **727 jobs**, or **27.19%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 16 agriculture, food, and food processing sectors is approximately **\$40.3 million**, or **30.02% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **397 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Ottawa County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	397.2	\$47,351,255
Grain farming	73.9	\$26,643,047
Support activities for agriculture and forestry	47.2	\$2,233,266
All other crop farming	46.0	\$3,487,471
Oilseed farming	21.9	\$22,078,644
Real estate	18.4	\$1,787,116
Animal production, except cattle and poultry and eggs	9.9	\$1,098,720
Monetary authorities and depository credit intermediation	9.6	\$1,920,044
Wholesale trade	8.3	\$1,531,520
Truck transportation	7.6	\$1,229,614

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$47.4 million** to the Ottawa County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	397.2	\$47,351,255
Grain farming	73.9	\$26,643,047
Oilseed farming	21.9	\$22,078,644
All other crop farming	46.0	\$3,487,471
Support activities for agriculture and forestry	47.2	\$2,233,266
Owner-occupied dwellings	0.0	\$2,114,897
Monetary authorities and depository credit intermediation	9.6	\$1,920,044
Real estate	18.4	\$1,787,116
Wholesale trade	8.3	\$1,531,520
Truck transportation	7.6	\$1,229,614

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Ottawa County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	21.9	\$22,078,643.80
Grain farming	73.9	\$26,643,047.33
Vegetable and melon farming	0.3	\$39,270.16
Fruit farming	2.1	\$122,351.50
Tree nut farming	1.0	\$129,826.66
Greenhouse, nursery, and floriculture production	0.5	\$43,499.07
All other crop farming	46.0	\$3,487,471.34
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	397.2	\$47,351,253.51
Poultry and egg production	0.3	\$178,680.35
Animal production, except cattle and poultry and eggs	9.9	\$1,098,720.31
Support activities for agriculture and forestry	47.2	\$2,233,265.88
Bread and bakery product, except frozen, manufacturing	5.6	\$543,756.96
Sawmills	0.2	\$53,144.45
Farm machinery and equipment manufacturing	2.7	\$849,525.21
Veterinary services	2.3	\$262,419.76
Landscape and horticultural services	5.6	\$211,167.38

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Ottawa County, the retail sector was omitted.